

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Custom Urethane Engineering Inc

Northwest Wisconsin Manufacturing Outreach Center

Custom Urethane Goes With The "Flow"

Client Profile:

Custom Urethane casts a variety of plastic parts based on customer designs. Founded in 1989, Custom Urethane employs 20 full-time people and is located in Osceola, Wisconsin.

Situation:

Custom Urethane faced serious business challenges to try and solve its problems of slow growth, cash flow bottlenecks, and unprofitability based on lack of a competitive market position. Custom Urethane heard about the work the Northwest Wisconsin Manufacturing Outreach Center (NWMOC), a NIST MEP network affiliate, had done to generate drastic improvements in another company. The company's president, Dennis Johnson, contacted the Center for more information about its flow manufacturing program.

Solution:

NWMOC helped Custom Urethane implement flow manufacturing principles into its production system. The organization provides flow manufacturing training to all company employees. NWMOC then facilitated a five-day implementation program in which Custom Urethane employees applied flow principles they learned during the training to redesign their workplace. With NWMOC's guidance, employees mapped processes on a flow chart and analyzed them to identify areas of improvement, transitioning line operations from a craftsman approach to production to a flow manufacturing system. After changing the manufacturing processes and creating a new production line, employee teams studied the plant layout to identify areas for improvement. Their efforts resulted in a new plant layout and the addition of a conveyor to move the molds more efficiently. NWMOC staff facilitated the implementation of a kanban system in the plant, which employs visual cues to improve line processes. These changes improved worker productivity, material flow, and oven utilization.

Results:

- Saved \$104,000 in labor cost.
- Anticipating sales increase of \$1 million in the next year.
- Reducing inventory by \$15,000.
- Reduced lead time by six days.
- Reduced material costs by \$40,000 per year, including a \$24,000 reduction in

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solid waste.

Reduced electrical costs by \$5,000 per year as a result of making more efficient use of the curing ovens.

Reduced floor space requirements by 3000 square feet.

Returned to profitability.

Testimonial:

"The Northwest Wisconsin Outreach Center staff didn't just prescribe some fixes for the problems we were experiencing, they led us through a process that forced us to identify our problems and figure out our own solutions to these problems. Once we learned the process, we now use it frequently to solve productivity, profitability, and plant layout problems."

Dennis C. Johnson, President